[10191/3649]

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In re Application of:		:
		: Examiner: P. Miller
	Jochen Kuehner et al.	:
For:	METHOD AND DEVICE FOR SENSOR-REDUCED REGULATION OF A SYNCHRONOUS MACHINE EXCITED BY A PERMANENT MAGNET	:
Filed:	October 6, 2004	: Art Unit: 2837
Serial No.:	10/510,287	:

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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop APPEAL BRIEF PATENT Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

Date: 12/18/2006

Signature:

AARON C. DEDITCH
(33,865)

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF TRANSMITTAL AND PETITION TO EXTEND

SIR:

Accompanying this Appeal Brief Transmittal is an Appeal Brief pursuant to 37 C.F.R. § 41.37 **in triplicate** as a courtesy (even though not required) for filing in the above-identified patent application.

This is also a **Petition To Extend** Under 37 C.F.R. § 1.136(a) to extend the two-month response date by one **(1) month** from the two-month date of November 12, 2006 to December 12, 2006 (Appellants mailed a Notice Of Appeal on September 8, 2006 which was filed in the U.S.P.T.O. on September 12, 2006 so that the two-month appeal brief due date is November 12, 2006).

Please charge the appropriate fees of **$620.00**, which includes the Appeal Brief fee under 37 C.F.R. § 1.17(c) (which is believed to be $500.00) and the Rule 136(a) extension fee (which is believed to be $120.00 for a one-month extension), to Deposit Account No. **11-0600**. The Commissioner is also authorized, as necessary and/or appropriate, to charge any additional and appropriate fees, including any further Rule 136(a) extension fees, or credit any overpayment to Deposit Account No. **11-0600**. Two duplicate copies of this transmittal are enclosed for these purposes.

Respectfully submitted,

Dated: 12/18/2006

By: Reg. No. 33,865 Aaron C. Deditch

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Date: 12/12/2006
Signature:
AARON C. DEDITCH
(33,865)

APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37

SIR:

In the above-identified patent application ("the present application"), Appellants mailed a Notice Of Appeal on September 8, 2006 – which was filed in the Office on September 12, 2006 --- from the Final Office Action issued by the U.S. Patent and Trademark Office on June 12, 2006, so that the two-month appeal brief due date is November 12, 2006 (since the Notice of Appeal was filed in the Office on September 12, 2006), which has been extended by one month to December 12, 2006 by the accompanying Appeal Brief Transmittal and which Petition to Extend.

In the Final Office Action, claims 17 to 32 were finally rejected.

A response After A Final Office Action was mailed on July 19, 2006, and an Advisory Action was mailed on August 16, 2006.

It is understood for purposes of the appeal that any Amendments to date have already been entered by the Examiner, and that the Response After Final does not require entry since it included no amendments.

The Replacement Appeal Brief is believed to comply with all the requirements of Rule 41.37. It is noted that the "concise explanation" language of the Rule is like the "concise explanation" requirement of former Rule 37 CFR 1.192, and that the length of the concise explanation provided herein should therefore be acceptable, since the format was acceptable under 37 CFR 1.192 and since it specifically defines the subject matter of the relevant claims involved in the appeal. AARON C. DEDITCH (reg. no. 33,865) has filed over twenty appeal briefs, the concise explanation for which has almost always been accepted by the Patent Office. ***<u>The Office is encouraged to contact the undersigned if there are any questions as to the description of the claimed subject matter.</u>***

<u>It is noted that the Patent Office Rules do not require the Applicants to include references cited by and relied upon by the Examiner in the Evidence Appendix (although it is required by the Office for the Examiner). In the present Appeal, the Applicants have not submitted any evidence on which they intend to rely, so that the Evidence Appendix lists no evidence.</u>

It is respectfully submitted that this Appeal brief complies with 37 C.F.R. 41.37. Although no longer required by the rules, this Brief is submitted in triplicate as a courtesy to the Appeals Board.

It is respectfully submitted that the final rejections of claims 17 to 32 (*claims 1 to 16 are canceled*) should be reversed for the reasons set forth below.

1. REAL PARTY IN INTEREST

The real party in interest in the present appeal is Robert Bosch GmbH ("Robert Bosch") of Stuttgart in the Federal Republic of Germany. Robert Bosch is the assignee of the entire right, title and interest in the present application.

2. RELATED APPEALS AND INTERFERENCES

There are no interferences or other appeals related to the present application, which "will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal".

3. STATUS OF CLAIMS

CLAIMS 1 TO 16 ARE CANCELED.

1. Claims 17 to 32 were finally rejected under the first paragraph of 35 U.S.C. § 112 as to enablement.

Appellants therefore appeal from the final rejections of pending and considered claims 17 to 32. A copy of all of the pending and considered and appealed claims 17 to 32 is attached hereto in the Appendix.

4. STATUS OF AMENDMENTS

In response to the Final Office Action mailed on July 16, 2004, Appellants filed an Amendment After A Final Office Action, which was mailed on September 7, 2004.

A Response After A Final Office Action was mailed on July 19, 2006 in response to the Final Office Action of June 12, 2006, and an Advisory Action was mailed on August 16,2006.

It is understood for purposes of the appeal that any Amendments to date have already been entered by the Examiner, and that the Response After Final does not require entry since it included no amendments.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter is described as follows, and is directed to addressing the following problems and/or providing the following benefits, and as described in the context of the present application.

Claim 17 is to a method for field-oriented regulating a synchronous machine excited by a permanent magnet, the method including: determining a quadrature-axis current component setpoint value; supplying the quadrature-axis current component setpoint value and rotational speed information to a decoupling network which contains a stationary machine model; d*etermining a direct-axis voltage component and a quadrature-axis voltage component in the decoupling network as a function of only the quadrature-axis current component setpoint value, the rotational speed information and the stationary machine model*; and converting the direct-axis voltage component and the quadrature-axis voltage component into triggering pulses for the synchronous machine. (*See* claim 17).

Likewise, claim 22 includes essentially the same features as claim 17 since claim 22 is to a device for field-oriented regulating a synchronous machine excited by a permanent magnet, including: a decoupling network which includes a stationary machine model having an input for a quadrature-axis current component setpoint value and an input for rotational speed information, and which is provided for *determining a direct-axis voltage component and a quadrature-axis voltage component as a function of only the quadrature-axis current component setpoint value, the rotational speed information and the stationary machine model*, and a conversion unit which is connected to the decoupling network for converting the direct-axis voltage component and the quadrature-axis voltage component into triggering pulses for the synchronous machine. (*See* claim 22).

To begin, *as to the background to claims 17 and 22*, the specification states in the Background Information that *it is already understood* in automotive engineering that a synchronous machine excited by a permanent magnet (PM synchronous machine, which is regulated in the rotor-field-oriented coordinate system) may be installed in a vehicle drive train as an integrated crankshaft starter generator between the engine and transmission.

Figure 1 shows a field-oriented current regulation of a PM synchronous machine having a pulse-width-modulation inverter, which is based on an actual value measurement of the phase currents of a three-phase system *and a determination of a direct-axis component and a quadrature-axis component of the regulating voltage with respect to the rotor position, based on actual measured values*. The present specification also states that the quadrature-axis component of current is proportional to the desired torque. As further stated, phase currents ia, ib, ic derived from the three-phase system of the PM machine are converted in a Park transformer 13 into Id_actual and Iq_actual currents of a rectangular coordinate system, where Id_actual is the current's actual direct-axis component and where Iq_actual is the current's actual quadrature-axis component of current of the machine. (See specification, pages 1, lines 2 to 26).

The setpoint input of direct-axis current component regulator 1 (which receives the actual direct and quadrature currents) receives a setpoint signal generated by a direct-axis setpoint generator 9 and the setpoint input of quadrature-axis regulator 2 receives a setpoint signal generated by a quadrature-axis setpoint generator 14. Quadrature-axis setpoint generator 14 generates the quadrature-axis setpoint signal as a function of the output signal of a battery voltage sensor. At the output of direct-axis regulator 1, a manipulated variable Id* for the direct-axis component is made available, and at the output of the quadrature-axis regulator 2 a manipulated variable Iq* is made available for the quadrature-axis component. These manipulated variables are sent to stationary decoupling network 5 which determines a direct-axis voltage component ud' and a quadrature-axis voltage component uq' for regulating the voltage of the PM synchronous machine using the above-described manipulated variables. (See specification, page 2, lines 19 to 37).

The regulated voltage components ud' and uq' are sent via output limiters 3 or 4 to an inverse Park transformer 6, which converts regulated voltage components ud and uq to regulated voltage components ua, ub and uc of the three-phase system. These are converted in a pulse inverter 7 into triggering pulses for PM synchronous machine 8. (See specification, page 3 lines 3 to 11).

In view of the Background, the Detailed Description of the present application discloses <u>*as to claim 17*</u> the following:

Figure 2 shows a block diagram of an exemplary embodiment of a *field-oriented current regulation* according to the exemplary embodiment and/or exemplary method of the present invention f*or a PM synchronous machine 8* (which has a permanent magnet). Claim 17 is to *field-oriented regulating a synchronous machine excited by a permanent magnet*. The device shown in Figure 2 has a logic unit 18 which supplies a setpoint value Iq_setpoint for the quadrature-axis current component at its output. In addition, logic unit 18 has a plurality of inputs. A first input of logic unit 18 is connected to a higher-level control unit 14. A second input of logic unit 18 is connected to the output of a battery voltage regulator 17. The third input of logic unit 18 receives information *regarding rotational speed n of the machine*. (<u>See</u> specification, page 5, lines 13 to 39).

Claim 17 also requires *determining a quadrature-axis current component setpoint value, and supplying the quadrature-axis current component setpoint value <u>and rotational speed information to a decoupling network which contains a stationary machine model</u>*. As described 9in the specification, the starting procedure is as follows: a start command comes from higher-level control unit 14 and contains information regarding setpoint torque M_setpoint, and in logic unit 18 quadrature-axis current component setpoint value Iq_setpoint is derived from this value. Quadrature-axis current component setpoint value Iq_setpoint is sent to stationary decoupling network 19 which contains a stationary machine model. *In this decoupling network the quadrature-axis current component setpoint value is converted to a direct-axis voltage component ud and a quadrature-axis voltage component uq of the regulating voltage <u>by including rotational speed n and the stored machine model. A stored table which takes into account machine parameters is used</u>*. Beyond a predetermined rotational speed threshold value in the network the quadrature-axis current component setpoint value is converted into a direct-axis voltage component ud and a quadrature-axis voltage component uq of the regulating voltage by including rotational speed n, and <u>*this also makes use of the stored table in which machine parameters are taken into account*</u>. (<u>See</u> specification, page 6, lines 3 to 31).

Claim 17 also requires *converting the direct-axis voltage component and the quadrature-axis voltage component into triggering pulses for the synchronous machine.* The specification describes that the regulating voltage components ua, ub and uc of the three-phase system (which take into account rotor angle γ as determined by a position sensor 24) are sent to a pulse-width-modulation inverter 7 *which output triggering pulses for PM synchronous machine 8*. (See specification, page 6, line 33 to page 7, line 6).

Accordingly, the foregoing description plainly is enabling as to the claimed subject matter of claim 17 (and of claim 22), and of the dependent claims.

Finally, the appealed claims include no means-plus-function language and no step-plus-function claims, so that 41.37(v) is satisfied as to its specific requirements for such claims, since none are present here. Also, the present application does not contain any step-plus-function claims because the method claims in the present application are not "step plus function" claims because they do not recite "a step for", as required by the Federal Circuit and as stated in Section 2181 of the MPEP.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 17 and 18 to 32 are enabled under the first paragraph of 35 U.S.C. § 112.

7. ARGUMENT

A. The Rejections Under The First Paragraph of 35 U.S.C. § 112 That Claims 17 and 18 to 32 Are Not Enabled

Claim 17 and Claims 18 to 32

Claims 17 and 22 recite essentially the same features that are in question, so that claim 22 is enabled for essentially the same reasons as claim 17, as are the respective dependent claims of claims 17 and 22.

As to claim 17, the Office Actions to date essentially assert that one of ordinary skill in the art would need to resort to undue experimentation to calculate or determine the direct

axis and quadrature axis voltages using only a setpoint value of a quadrature axis current, together with a rotational speed information and a stationary model. In short, however, it is not the specifics that are being claimed, but the method of using only this information.

In short, the present application makes plain (as explained in detail herein) that the direct-axis component of the regulated voltage (ud) and the quadrature-axis component of the regulated voltage (uq) are determined in a decoupling network 19. In this context, and for this determination, only the setpoint value of quadrature-axis current component and the information on the rotational speed are required. With a stationary machine model, the two voltage components are determined -- that is, the direct-axis component of the regulated voltage (ud) and the quadrature-axis component of the regulated voltage (uq). For the stationary machine model, a model in table form is involved which includes the required interrelationships. The machine model is set up, for example, empirically for the respective permanent magnetically energized synchronous machine, and the machine-specific parameters are filed in the stored table. One of ordinary skill in the field of such machines would plainly understand -- based on the disclosure of the present application -- the foregoing information so as to be able to practice the claimed subject matter of claim 17 and its dependent claims, as well as claim 22 (and its dependent claims) since claim 22 includes features like those of claim 17.

More particularly, the Final Office Action essentially and conclusorily asserts that one of ordinary skill in the art would need to resort to undue experimentation to calculate the direct axis and quadrature axis voltages using only a setpoint value of a quadrature axis current, rotational speed information and a stationary model, but this assertion -- which is based on nothing more than the opinion of the Examiner, is wholly refuted by the foregoing.

In this regard, the above prior and straightforward explanation was wholly ignored and not addressed in any way -- let alone refuted -- in the Final Office Action because it could not be since the present application is plainly enabling as to the claimed subject matter of claim 17, as follows:

First, the Detailed Description of the present application discloses *as to claim 17* the following:

Figure 2 shows a block diagram of an exemplary embodiment of a *field-oriented current regulation* according to the exemplary embodiment and/or exemplary method of the present invention *for a PM synchronous machine 8* (which has a permanent magnet). Claim 17 is to *field-oriented regulating a synchronous machine excited by a permanent magnet.* The device shown in Figure 2 has a logic unit 18 which supplies a setpoint value Iq_setpoint for the quadrature-axis current component at its output. In addition, logic unit 18 has a plurality of inputs. A first input of logic unit 18 is connected to a higher-level control unit 14. A second input of logic unit 18 is connected to the output of a battery voltage regulator 17. The third input of logic unit 18 receives information *regarding rotational speed n of the machine.* (<u>See</u> specification, page 5, lines 13 to 39).

Claim 17 also requires *determining a quadrature-axis current component setpoint value, and supplying the quadrature-axis current component setpoint value <u>and rotational speed information to a decoupling network which contains a stationary machine model</u>.* As described 9in the specification, the starting procedure is as follows: a start command comes from higher-level control unit 14 and contains information regarding setpoint torque M_setpoint, and in logic unit 18 quadrature-axis current component setpoint value Iq_setpoint is derived from this value. Quadrature-axis current component setpoint value Iq_setpoint is sent to stationary decoupling network 19 which contains a stationary machine model. *In this decoupling network the quadrature-axis current component setpoint value is converted to a direct-axis voltage component ud and a quadrature-axis voltage component uq of the regulating voltage <u>by including rotational speed n and the stored machine model. A stored table which takes into account machine parameters is used</u>.* Beyond a predetermined rotational speed threshold value in the network the quadrature-axis current component setpoint value is converted into a direct-axis voltage component ud and a quadrature-axis voltage component uq of the regulating voltage by including rotational speed n, and *<u>this also makes use of the stored table in which machine parameters are taken into account</u>*. (<u>See</u> specification, page 6, lines 3 to 31).

Claim 17 also requires *converting the direct-axis voltage component and the quadrature-axis voltage component into triggering pulses for the synchronous machine.* The specification describes that the regulating voltage components ua, ub and uc of the three-

phase system (which take into account rotor angle γ as determined by a position sensor 24) are sent to a pulse-width-modulation inverter 7 *which output triggering pulses for PM synchronous machine 8*. (See specification, page 6, line 33 to page 7, line 6).

Accordingly, the foregoing description plainly is enabling as to the claimed subject matter of claim 17 (and of claim 22), and of the dependent claims.

As further regards the enablement rejection under the first paragraph of 35 U.S.C. § 112, the following is respectfully submitted:

The standard for determining whether a patent application complies with the enablement requirement is that the specification describe how to make and use the invention — which is defined by the claims. (See M.P.E.P. § 2164). The Supreme Court established the appropriate standard as being whether any experimentation for practicing the invention was undue or unreasonable. (See M.P.E.P. § 2164.01 (citing Mineral Separation v. Hyde, 242 U.S. 261, 270 (1916); In re Wands, 858 F.2d. 731, 737, 8 U.S.P.Q.2d 1400, 1404 (Fed Cir. 1988))). Thus, the enablement test is "whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." (See id. (citing United States v. Teletronics, Inc., 857 F.2d 778, 785, 8 U.S.P.Q.2d 1217, 1223 (Fed. Cir. 1988))).

The Federal Circuit has made clear that there are many factors to be considered in determining whether a specification satisfies the enablement requirement, and that these factors include but are not limited to the following: the breadth of the claims; the nature of the invention; the state of the prior art; the level of ordinary skill; the level of predictability in the art; the amount of direction provided by the inventor; the existence of working examples; and the quantity of experimentation needed to make or use the invention based on the disclosure. (See id. (citing In re Wands, 858 F.2d at 737, 8 U.S.P.Q.2d at 1404 and 1407)). In this regard, the Federal Circuit has also stated that it is "improper to conclude that a disclosure is not enabling based on an analysis of only one of the above factors," and that the examiner's analysis must therefore "consider all the evidence related to each of these factors" so that any nonenablement conclusion "must be based on the evidence as a whole." (See

M.P.E.P. § 2164.01). It is respectfully submitted that the Office Action has not addressed these factors.

Importantly, an examiner bears the initial burden of establishing why the "scope of protection provided by a claim is not adequately enabled by the disclosure." (See id. (citing In re Wright, 999 F.2d 1557, 1562, 27 U.S.P.Q.2d 1510, 1513 (Fed. Cir. 1993))). Accordingly, a specification that teaches the manner and process of making and using an invention in terms that correspond in scope to those used in describing and defining the claimed subject matter complies with the enablement requirement. (See id.).

It is believed that the present assertions of the Office Actions to date do not adequately address whether the present application enables a person having ordinary skill in the art to practice the claimed subject matter of the claims without undue experimentation — which it does. In short, it is believed that to date the Office Actions' arguments and assertions do not really address the issue of whether one having ordinary skill would have to *unduly experiment* to practice the claimed subject matter of the rejected claims — a proposition for which the Office bears the burden of proving a prima facie case as to the rejected claims. As explained, the Final Office Action did not address in any way (let alone refute) the explanation as to why the subject matter is enabled.

In this regard, to properly establish enablement or non-enablement, the Office must make use of proper evidence, sound scientific reasoning and the established law. In the case of Ex Parte Reese, 40 U.S.P.Q.2d 1221 (Bd. Pat. App. & Int. 1996), a patent examiner rejected (under the first paragraph of section 112) application claims because they were based on an assertedly non-enabling disclosure, and was promptly reversed because the rejection was based only on the examiner's subjective belief that the specification was not enabling as to the claims.

In particular, the subjective assertions of the Office Action are simply not supported by any real "evidence or sound scientific reasoning" — which the law requires and which makes plain that the Office (and not an applicant) bears the burden of persuasion on an enablement rejection. No evidence has been offered by the Office and the only "reasoning" offered is that the Examiner believes that a person could not do so. The federal Circuit has

made plain that this does not satisfy the evidentiary standard for establishing that a claim is not enabled based on the application.

In this regard, the examiner in Ex parte Reese was reversed because the rejection had only been based on a conclusory statement that the specification did not contain a sufficiently explicit disclosure to enable a person to practice the claimed invention without exercising undue experimentation — which the Board found to be merely a conclusory statement that only reflected the subjective and unsupported beliefs of a particular examiner and that was not supported by any proper evidence, facts or scientific reasoning. (See id.). Moreover, the Board made clear that it is "incumbent upon the Patent Office . . . to back up assertions of its own with acceptable evidence," and also made clear that "[where an] examiner's 'Response to Argument' is not supported by evidence, facts or sound scientific reasoning, [then an] examiner has not established a *prima facie* case of lack of enablement under 35 U.S.C. § 112, first paragraph." (See id. at 1222 & 1223; italics in original).

In the present case, it is respectfully submitted that the Office Actions to date have not satisfied the foregoing for establishing that undue experimentation would be required since no evidence has been provided except for the wholly unsupported opinions of the Examiner as to claim 17.

Accordingly, claim 17 is enabled for the foregoing reasons, as are its dependent claims. Claim 22 is enabled for essentially the same reasons as claim 17, as are the dependent claims of claim 22. It is therefore respectfully requested that the enablement rejections as to claims 17 to 32 be withdrawn for all of the above reasons.

Accordingly, it is respectfully submitted that claims 17 to 32 are enabled and are therefore allowable for the above reasons.

CONCLUSION

In view of the above, it is respectfully requested that the rejections of claims 17 to 32 be reversed, and that these claims be allowed as presented.

Respectfully submitted,

Dated: 12/12/2006

By: G A Messina (Reg. No. 33,865 Aaron C. Deditch)

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CLAIMS APPENDIX

1-16. (Canceled).

17. (Previously Presented) A method for field-oriented regulating a synchronous machine excited by a permanent magnet, the method comprising:

determining a quadrature-axis current component setpoint value;

supplying the quadrature-axis current component setpoint value and rotational speed information to a decoupling network which contains a stationary machine model;

determining a direct-axis voltage component and a quadrature-axis voltage component in the decoupling network as a function of only the quadrature-axis current component setpoint value, the rotational speed information and the stationary machine model; and

converting the direct-axis voltage component and the quadrature-axis voltage component into triggering pulses for the synchronous machine

18. (Previously Presented) The method of claim 17, wherein the quadrature-axis current component setpoint value is determined in a logic unit.

19. (Previously Presented) The method of claim 18, wherein a reversing operation is performed in the logic unit as a function of a predetermined rotational speed threshold value.

20. (Previously Presented) The method of claim 19, wherein the quadrature-axis current component setpoint value is derived by a higher-level control unit at rotational speeds which are lower than the predetermined rotational speed threshold value.

21. (Previously Presented) The method of claim 20, wherein the quadrature-axis current component setpoint value is derived from a setpoint torque predetermined by the higher-level control unit.

22. (Previously Presented) The method of claim 21, wherein the setpoint torque is the starting torque.

23. (Previously Presented) The method of claim 19, wherein the quadrature-axis current component setpoint value is derived by a battery voltage regulator at rotational speeds which are greater than the predetermined rotational speed threshold value.

24. (Previously Presented) The method of claim 23, wherein the battery voltage regulator determines the quadrature-axis current component setpoint value as a function of a battery voltage setpoint value supplied by a higher-level energy management system and a battery voltage actual value supplied by a battery voltage sensor.

25. (Previously Presented) A device for field-oriented regulating a synchronous machine excited by a permanent magnet, comprising:

a decoupling network which includes a stationary machine model having an input for a quadrature-axis current component setpoint value and an input for rotational speed information, and which is provided for determining a direct-axis voltage component and a quadrature-axis voltage component as a function of only the quadrature-axis current component setpoint value, the rotational speed information and the stationary machine model, and

a conversion unit which is connected to the decoupling network for converting the direct-axis voltage component and the quadrature-axis voltage component into triggering pulses for the synchronous machine.

26. (Previously Presented) The device of claim 25, wherein it includes a logic unit having an output for the quadrature-axis current component setpoint value.

27. (Previously Presented) The device of claim 26, wherein the logic unit has an input for rotational speed information and for performing a reversing operation as a function of a predetermined rotational speed threshold value.

28. (Previously Presented) The device of claim 27, wherein the logic unit outputs at its output a quadrature-axis current component setpoint value which is derived by a higher-level control unit at rotational speeds which are lower than the predetermined rotational speed threshold value.

29. (Previously Presented) The device of claim 28, wherein the logic unit derives the quadrature-axis current component setpoint value from a setpoint torque which is derived by the higher-level control unit.

30. (Previously Presented) The device of claim 29, wherein the setpoint torque is a starting torque.

31. (Previously Presented) The device of claim 27, wherein the logic unit outputs at its output a quadrature-axis current component setpoint value which is supplied by a battery voltage regulator at rotational speeds which are greater than the predetermined rotational speed threshold value.

32. (Previously Presented) The device of claim 31, wherein the battery voltage regulator has a battery voltage setpoint value input which is connected to a higher-level energy management system and has a battery voltage actual value input which is connected to a battery voltage sensor.

EVIDENCE APPENDIX

Appellants have not submitted any evidence pursuant to 37 C.F.R. §§ 1.130, 1.131 or 1.132, and do not rely upon evidence entered by the Examiner.

RELATED PROCEEDINGS INDEX

There are no interferences or other appeals related to the present application.